REMARKS:

1. Claims 1-7 and 20-23 are pending. In response to the Office Action mailed 11/20/2008, the applicant hereby amends this application. Claims 1, 5-7, 20 and 23 are amended. One new claim numbered 23 is presented.

2. Claims 6-7 and 23 were rejected under 35 USC 112, second paragraph, as being indefinite. In response, these claims have been amended to cure any deficiencies that might have existed with respect to the requirements of the cited statute. As a result, it is believed these rejections have been traversed.

3. Claims 1-7 and 20-22 were rejected under 35 USC 102(e) as being anticipated by Kelly (US 2004/0057503A1). With respect to the amended claims, the applicant disagrees.

Kelly discloses a method and apparatus to process a composite signal comprising a spread spectrum signal and an interfering signal to determine the center frequency of the interfering signal. Kelly then shifts the composite signal by an amount determined from the characteristic frequency of the interfering signal, thereby creating a shifted composite signal at which the frequency of the interfering signal is a predetermined frequency. Kelly then filters the shifted composite signal to remove the interfering signal, thereby creating an interference-free shifted signal. Kelly then reshifts the interference-free shifted signal by the amount determined from the characteristic frequency of the interfering signal, thereby recovering the desired spread spectrum signal. Kelly, Abstract.

4. The present invention is directed to a system for the efficient use of CORDIC rotators. The system includes at least one first rotator operating in a vector mode and includes a sign storage buffer. The system also includes at least one bit inverter coupled between the first rotator and a second rotator, the second rotator operating in a rotation mode. Abstract.

Claim 1 is copied below:

A system for the efficient use of CORDIC rotators, the system comprising:

> at least one first rotator, wherein the at least one first rotator comprises at least one first sign storage buffer;

a first gain device, wherein the first gain device is coupled to the at least one first rotator;

a first limiter, wherein the first limiter is coupled to the first gain device;

at least one bit inverter, wherein the at least one bit inverter is coupled to the at least one first rotator; and

at least one second rotator, wherein the at least one second rotator comprises at least one second sign storage buffer, and wherein the at least one second rotator is coupled to the at least one first rotator;

wherein the at least one first rotator operates in a vector mode and the at least one second rotator operates in a rotation mode. (emphasis added)

As shown above, claim 1 includes a first underlined limitation, "a first limiter, wherein the first limiter is coupled to the first gain device". This first limitation is not found in Kelly, fundamentally because Kelly is primarily involved in frequency shifting and filtering out the interfering signal. As such, the only components remotely related to the claimed "limiter" are the comb filter 120 and the DC notch filter 132, which components are described in Kelly, paragraph 0019.

As further shown above, claim 1 includes a second underlined limitation, "wherein the at least one first rotator operates in a vector mode and the at least one second rotator operates in a rotation mode". Support for this second limitation, added by amendment herein, is found in the application at least at page 10, lines 13-15, and in the abstract. Further, this second limitation is not found in Kelly, fundamentally because Kelly is primarily involved in frequency shifting. Hence, in the embodiment depicted in Kelly's FIG. 1, the frequency shifting devices 108, 134 and 142 all operate in a rotating (frequency shifting) mode. These components are described in Kelly, paragraphs 0020, 0023 and 0025.

Likewise, in the embodiment depicted in Kelly's FIG. 3, the frequency shifting

devices 302, 304 and 306 all operate in a rotating (frequency shifting) mode. These components are described in Kelly, paragraph 0026.

Likewise, in the embodiment depicted in Kelly's FIG. 4, the frequency shifting devices 402, 404 and 406 all operate in a rotating (frequency shifting) mode. These components are described in Kelly, paragraph 0029.

Because Kelly does not satisfy at least the underlined first and second claim 1 limitations, then Kelly does not anticipate claim 1. Moreover, claim 1 is allowable and this rejection is traversed.

5. Claims 2-7 are dependent on claim 1. As a result, these claims 2-7 are allowable at least on the grounds that their common parent claim 1 is itself allowable, as explained in 4 above.

6. Claim 20 is copied below:

A system for the efficient use of CORDIC rotators, the system comprising:

at least one first rotator, wherein the at least one first rotator comprises at least one first sign storage buffer;

at least one bit inverter, wherein the at least one bit inverter is coupled to the at least one first rotator; and

at least one second rotator, wherein the at least one second rotator comprises at least one second sign storage buffer and wherein the at least one second rotator is coupled to the at least one first rotator;

wherein the at least one first rotator operates in a vector mode and the at least one second rotator operates in a rotation mode.

As shown above, claim 20 includes an underlined limitation, "wherein the at least one first rotator operates in a vector mode and the at least one second rotator operates in a rotation mode". Support for this limitation, added by amendment herein, is found in

the application at least at page 10, lines 13-15, and in the abstract. This limitation is not found in Kelly, fundamentally because Kelly is primarily involved in frequency shifting. Hence, in the embodiment depicted in Kelly's FIG. 1, the frequency shifting devices 108, 134 and 142 all operate in a rotating (frequency shifting) mode. These components are described in Kelly, paragraphs 0020, 0023 and 0025.

Likewise, in the embodiment depicted in Kelly's FIG. 3, the frequency shifting devices 302, 304 and 306 all operate in a rotating (frequency shifting) mode. These components are described in Kelly, paragraph 0026.

Likewise, in the embodiment depicted in Kelly's FIG. 4, the frequency shifting devices 402, 404 and 406 all operate in a rotating (frequency shifting) mode. These components are described in Kelly, paragraph 0029.

Because Kelly does not satisfy at least the underlined claim 20 limitation, then Kelly does not anticipate claim 20. Moreover, claim 20 is allowable and this rejection is traversed.

7. Claims 21-22 are dependent on claim 20. As a result, these claims 21-22 are allowable at least on the grounds that their common parent claim 20 is itself allowable, as explained in 6 above.

8. The office action stated that claim 23 would be allowable if amended to overcome the rejection under 35 USC 112, second paragraph. As described in 2 above, claim 23 has been amended to cure any deficiency that may have existed with respect to the requirements of the cited statute. As a result, it is believed the rejection under 35 USC 112, second paragraph has been overcome and thus claim 23 is allowable.

9. Should any unresolved issue remain, the Examiner is cordially invited to call Applicants' attorney at the telephone number indicated below.

Respectfully submitted:

Wayne J. Egan — 19 December 2008

Wayne J. Egan
Reg. No.: 33,168
Customer No.: 29683
HARRINGTON & SMITH, PC
4 Research Drive
Shelton, CT 06484-6212
Telephone: (203)925-9400
Facsimile: (203)944-0245
email: wegan@hspatent.com

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450.

Dec. 19, 2008 — Lori Conway

Date — Name of Person Making Deposit